

RADARS[®]

S Y S T E M

Title:	Age trends in abuse calls to poison centers involving prescription opioids
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Abstract:

Aims: The purpose of this study was to examine correlates and differences in the peak age in years of intentional abuse calls to poison centers mentioning different classes of prescription opioids.

Methods: Data from the RADARS[®] System Poison Center program were used. Mentions of prescription opioid drug classes by intentional abuse cases from the 1st quarter of 2010 through the 2nd quarter of 2012 were summed by age between the ages of 11 years and 69 years. A linear regression model tested the association between the age with the greatest number of mentions (peak age) for each drug and the log of number of individuals filling a prescription for that drug. A negative binomial regression was used to fit a growth curve to each prescription opioid class to examine differences in age trends by drug.

Results: Findings suggest a statistically significant ($R^2 = 0.56$, $p = 0.032$) inverse association between peak age of intentional abuse calls to poison centers and drug availability. Hydrocodone, oxycodone, and tramadol were the most available drugs and had peak abuse ages under 22. Methadone and hydromorphone were less available and had peak abuse ages over 23. Growth curve modeling yielded statistically significant differences in age trends of intentional abuse exposures by drug class. Differences in the total number of abuse exposure mentions between drugs were greatest prior to age 20.

Conclusions: Younger abusers who are more likely to be in the early stages of drug abuse are likely to abuse opioid medications that are readily available. Most intentional abuse calls involve cases under the age of 30 and primarily involve hydrocodone, oxycodone, and tramadol. After age 20, differences between drug classes are less pronounced.

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